Working with Community-Based Conservation with A Gender Focus

A Guide

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1717 Massachusetts Ave. NW, Suite 302, Washington, DC 20036 USA
Tel.: 202-332-2853 FAX: 202-332-8257 Internet: WIDinfo@widtech.org

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Working with Community-Based Conservation with a Gender Focus: A Guide

by

Mary Hill Rojas
Environmental Specialist
Development Alternatives, Inc.

Based on a mid-term evaluation of the Parks in Peril Project

July 1999

WID TECH

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PREFACE

The WIDTECH Project, funded by the Office of Women in Development (G/WID) of the United States Agency for International Development (USAID), provides technical assistance and training on gender issues to USAID bureaus and missions. In spring 1998, at the request of Eric Fajer of USAID's Latin American and Caribbean (LAC) Bureau, the author, a WIDTECH environment specialist, served as a member of the Parks in Peril (PIP) Project evaluation team. The rest of the team consisted of Laurence Hausman, team leader, institutional relationships and strengthening; Allen Putney, management of protected areas; and Lorenzo Rosenzweig, conservation finance.

The team reviewed the progress under the Parks in Peril Project, a cooperative agreement between The Nature Conservancy and USAID. As part of the evaluation, the team visited seven protected areas in Mexico (La Encrucijada, El Ocote, and Sian Ka'an), Ecuador (Machalilla), Peru (Bahuaja Sonene), Costa Rica (Talamanca), and Guatemala (Sierra de Las Minas). The team also held discussions with headquarters staff at USAID's and The Nature Conservancy's offices in Washington, D.C.

The team was "to assess the overall performance of PIP against the program's purpose and results outlined in the USAID Results Framework." The PIP project's strategic objective is the "protection of selected Latin American and Caribbean parks and reserves important to conserve the hemisphere's biological diversity."

The purpose of the evaluation was not to evaluate the individual sites but to evaluate the PIP Project overall. Therefore, observations during particular site visits were used as examples illustrating broader issues.

This guide uses examples from the site visits and builds on the results of the evaluation to suggest ways that PIP project personnel can easily, efficiently, and equitably integrate gender in their work. In December 1998, at the request of Eric Fajer and Constance Campbell, Community-Based Conservation Manager with The Nature Conservancy, I wrote this guide in partial fulfillment of one of the evaluation recommendations, "to document the PIP experience with gender" (Parks in Peril, p. 22).

I am grateful to Eric and Constance for supporting this project. I am also grateful to The Nature Conservancy personnel and their partners working with the PIP project and the local men and women living near the protected areas who provided the examples on gender used in this document.

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WORKING WITH COMMUNITY-BASED CONSERVATION WITH A GENDER FOCUS

INTRODUCTION

The Parks in Peril (PIP) Project was developed to conserve imperiled ecosystems in Latin America and the Caribbean by "ensuring on-site management of officially designated protected areas containing globally important biological diversity." "Parks in peril" is a term used by The Nature Conservancy for 55 conservation sites in Latin America and the Caribbean. The United States Agency for International Development (USAID) has provided funding for 28 of these sites, with plans for adding new sites in the near future.

With the support of USAID/Washington and the USAID missions in each country, The Nature Conservancy works with one or more partners—local nongovernmental organizations (NGOs)—at each site. The following are the partners for the seven sites visited during the evaluation:

- La Encrucijada, Mexico: Instituto de Historia Natural de Chiapas;
- El Ocote, Mexico: Instituto de Historia Natural de Chiapas;
- Sian Ka'an, Mexico: Amigos de Sian Ka'an;
- Machalilla, Ecuador: Fundación Natura and The Conservation Data Center;
- Bahuaja Sonene, Peru: Pro Naturaleza;
- Talamanca, Costa Rica: Talamanca Caribbean Biological Corridor Commission; and
- Sierra de las Minas, Guatemala: Defensores de la Naturaleza.

These partners, in turn, work with other local NGOs. (One partner, the Talamanca Caribbean Biological Corridor Commission, is a confederation of 14 local grassroots organizations.) The seven sites have diverse environments, ranging from coastal reserves to tropical forests and savannas to mountain forests. A primary goal of the PIP project is to gain the support and involvement of the communities that live in and around the parks and reserves so that they, too, have a stake in the conservation of biodiversity.

PURPOSE OF THE GUIDE

Attention to gender is an important part of community-based conservation and of the policy and programs that support conservation. This guide, built on examples and lessons learned from the mid-term evaluation of the Parks in Peril Project, is meant for use by the personnel of the PIP project and their partners and others who work with community conservation. It provides six steps for PIP project personnel to "do gender analysis" with little, if any, additional time and resources.

HOW TO USE THE GUIDE

This guide can be used either in its entirety as a short workshop on gender (two to three hours) or as part of a regular staff meeting agenda (20 to 30 minutes). In both cases, a facilitator should prepare for the training. In the guide, a "Note to the Facilitator," which briefly describes an issue relating gender and conservation, begins each step. The issue can be copied and sent to the participants ahead of time for their consideration, or it can be presented by the facilitator at the workshop or meeting. Following each "Note" is an exercise designed to spark discussion among participants. Each exercise results in a product (such as a rationale on community conservation and gender) or a skill (for example, rapid gender analysis in the field and within institutions). The transmission of knowledge is minimal. Instead, the facilitator sets the stage so that information is shared through structured small groups, large group discussion, and interactive exercises.

By the end of training, participants will be able to:

- Develop a rationale for their institution's incorporating gender into community conservation;
- Analyze women's roles and their relationship to natural resource management;
- Highlight the accomplishments of both women and men in organizational documents and environmental education materials;
- Analyze women's groups and their potential contribution to conservation;
- Articulate the importance of women's participation in conservation efforts, the barriers to participation that women face, and ways to remove these barriers; and
- Promote cross-sectoral work in education and democracy and governance as a means to address environmental issues.

STEP ONE: DEVELOP A RATIONALE FOR PAYING ATTENTION TO GENDER

Note to the Facilitator

"Why do we care about gender?" The conservation of biodiversity relies on the involvement of the full community constituency, both women and men, whose interests in and perspectives on natural resources may be quite different. Often, however, women are underrepresented or not represented at all at the local or policy levels where decisions are made. To use gender in their work, PIP personnel need to develop and articulate a rationale that ties gender to community-based conservation. One such rationale follows:

The Parks in Peril Project works in concert with the policy of the first Latin American Congress on National Parks and Other Protected Areas held in Santa Marta, Colombia, in

1997, which recognizes that conservation is a social issue. Within the PIP project, there is a recognition that engaging communities to foster the conservation of biodiversity and the well being of the protected areas is critical to the reserves' long-term viability, especially when hunger and poverty lie close to reserve boundaries. Food, habitat, livelihood, and health depend on a healthy environment.

Those who work to conserve biodiversity recognize the different types of stakeholders and the various levels and definitions of community—those within the protected area or on its borders, urban constituencies, and the broader regional, national, and international communities that support the reserves. Gender is central to this community-based approach, affecting how communities and households are organized and, in turn, how they relate to the environment around them.

A community-based approach to conservation builds on the vital roles that women and men play in understanding and managing the environment that surrounds them both in rural and urban settings. The community-based approach:

- Encourages environmental decision-making, leadership, and participation of both men and women within the civil society so that they can better serve as advocates for environmental issues that concern them, their families, and their communities.

- Develops strategies for conservation and resource management based on democratic principles, participatory techniques, and an understanding of how gender shapes the access to, participation in, and agenda of collective activities affecting the environment.

- Addresses specifically the economic, social, institutional, and legal constraints to effective management of natural resources by men and women.

As a part of this overall approach, gender analysis is a useful conservation tool because it:

- *Assists in breaking down stereotypes.* The documentation of the presence of women as reserve directors and forest rangers in Peru serves to dispel the common notion that protected areas are too remote to attract professional women. (Parks in Peril, pp. 22 and 31).

- *Uncovers roles that are overlooked.* Often women are defined, and define themselves, as "housewives," which masks their roles as daily managers of natural resources, providing water and firewood for their families, tending kitchen gardens and fruit trees, disposing of garbage, and tending livestock. Men and women may make different uses of the same resources and habitats.

- *Helps ensure the representation of diversity in environmental education materials.* Women play a central role in environmental education because their intimate relationship to their communities and families provides an ideal conduit for environment messages. Environmental education messages, however, tend to target men in their depiction of the management of natural resources.

- *Reveals the multiple institutions that support communities.* People's resource use often obeys informal norms that are embedded in social relations of kinship, marriage, religion, ethnicity, or class. These institutional norms may not be formalized or visible to outsiders. The formal institutional realm may be quite stratified by gender. Women often have a small political presence on community councils. Public meetings generally are perceived as male spaces, and local organizations and institutions may be based on male hierarchies. These institutional barriers for women need to be recognized in mobilizing public support for environmental improvements, with more attention placed on informal institutions when appropriate.

  Including local women and men in an activity can improve the environmental results of a project. Not including them can often doom an intervention. This is particularly true with women because they are more invisible than men and are often not included. The following example from a recent study on a mangrove ecosystem in the Gulf of Fonseca, bordered by Nicaragua, El Salvador, and Honduras, illustrates this point:

  In an attempt to conserve the mangroves, restrictions have been placed on fishing in the estuaries and attempts have been made to preserve timber and limit firewood use. The majority of women fish in the estuaries, while the men fish in the open sea. The roles of women in fishing were not understood, and the restrictions limited their access rights. A vital source of household protein and income was being been lost. Women also gather firewood. Individuals continue to fish in the estuary secretly and to gather firewood for their own use or to sell. "This highlights an important conservation lesson: unless the constraints that individual and communities face in changing their resource use are considered, attempts to change may not succeed" (Gammage, p. 4).

Exercise

Give a copy of the above rationale to staff and partners to read before a staff meeting or workshop. Discuss the rationale at the meeting in small groups. Have the small groups report their ideas back to the full group, then have the full group reach a consensus on a rationale that is acceptable as a framework for working with gender in the protected area.

STEP TWO: DECONSTRUCT TERMS TO UNDERSTAND GENDER ROLES AND RELATIONS

Note to the Facilitator

Language often masks the roles and relations of men and women to natural resources. Many terms in many languages—such as "farmer," "forester," and "rubber tapper"—conjure up a male image. "The farmer wore a dress" is a startling phrase. Often, however, women play critical roles in managing natural resources, either directly or indirectly, through decision-making, processing, or marketing. Deconstructing terms to make women's work visible fosters conservation by showing the diversity of interests involved.

Women who live near protected areas often are defined by themselves, their families, protected area staff, and others as "housewives." Men generally have descriptive titles—"fisherman," "farmer," or "cheese maker"—that more clearly delineate their relationship to natural resources. It is important to deconstruct the term "housewife" in order to understand how women interact with the natural world around them.

Exercise

Have staff or others ask what women (and men) do when they are in the field. People enjoy describing their "typical day" or brainstorming with others about how they spend their time. The following list from El Ocote was formulated by an extension agent, a woman who quickly enumerated the tasks that put a housewife directly in contact with the natural resources in and around the protected area:

- Fishing: Some women fish, but all women cook, clean, market, and preserve fish.
- Herbs: Women grow herbs (*chipitin, hierba santa, achiote,* and *pimienta*) for adornment, medicine, and food.
- Crops:
  - Maize. Women store the corn, grind it, and make the daily tortilla and *atol***.**
  - Coffee. Some women plant and help with the harvest. All women process (that is, select, wash, shell, dry, and bag) the beans after picking. The men market the coffee. For home use, women toast, grind, and make the coffee.
  - Chili. Women make the seed beds, transplant, control insects, and care for the plants. They cut and select the chilies for size and color and then bag and market them.
- Garden: The woman is responsible for the garden that provides food for the family and market (tomatoes, squash, *hierba mora,* and *hierba buena*).
- Animals: Women tend chickens and turkeys for home use and barter.
- Fruit: Women collect *nance,* oranges, limes, and lemons to market or to make conserves.
- Water and wood: Women are responsible for gathering water and firewood for family needs.

A second illustration comes from Bahuaja Sonene, where two of the greatest threats to conservation are gold mining and unregulated collection of Brazil nuts. Women were identified as "housewives" and the men as "miners" and "nut collectors." The director of a

local NGO, a woman, deconstructed the term housewife to shed light on women's roles in these activities:

- **Brazil nut collection.** During the harvest season, both women and men move to the forest to collect nuts. Women collect, dry, peel, and often sell the nuts. The majority of contracts for collecting nuts are in the woman's name. Men also collect the nuts, transport them by boat to market, use machetes to break open the shell, and carry the bags of nuts (often 75 kilograms) on their backs out of the forest.

- **Gold mining.** Both men and women set up camp in the forest near the mining site. The woman buys the food, cooks, and generally sets up house. She often does the contracting to mine the gold and sells the gold. Mining gold is hard labor, and the men do the digging and the processing.

A final example illustrates the importance of deconstructing terms to find where women fit:

- **Iguana farming.** By defining terms too narrowly women's work may be overlooked. Iguana farming in El Ocote was defined as the raising of iguana, men's work. When defined more broadly to include the slaughter, skinning, and cooking of the animals, however, women played an equal role yet may not have enjoyed the project benefits.

Deconstructing terms not only breaks down stereotypes but also allows important insights into the use of natural resources. Such insights can inform strategic planning and policy decisions for conservation.

STEP THREE: HIGHLIGHTING WOMEN AS WELL AS MEN AS PIP PARTICIPANTS

Note to the Facilitator

It is important to make visible the involvement of both women and men throughout the PIP project so that credit is given for what has been accomplished and lessons learned are documented.

Family Roles

Besides the direct participation of women in PIP activities, women and men take pride in their roles as spouses and parents. These roles are important to women and men, and they can serve conservation.

One example is from Sierra de las Minas. Don Juan is an influential catechist who lives with his family near the reserve. They have a mixed farm that could serve as a model for sustainable agriculture: worm composting, terraces with cardamom, coffee, and fruit trees, and a *Tilapia* fish pond. A sign on their door says, "The forest is life—take care of it for your

children." His wife supports his work, especially with the cultivation of native plants and traditional medicines. She knows the plants for childhood sicknesses and travels with her husband to share this knowledge with neighbors.

A second example is from Sian Ka'an. The reserve funds a nursery that rescues the old Mayan traditions to restore soils, protect the forest, and grow native and medicinal plants. A local man runs the nursery, conducts basic research, and acts as an extension agent. His wife also works in the nursery and knows the uses of plants for bites, gastritis, aching bones, and women in labor. In this case, the wife works with her husband but without pay. There is a need to recognize the value to conservation of husband and wife teams like this one.

Leaders and Professionals

Women are visible in a variety of leadership and professional roles throughout the PIP project area. They are heads of ministries of the environment (Mexico), founders of partner NGOs (Sian Ka'an), extension agents (La Encrucijada and El Ocote), leaders of reserve councils (Talamanca), park guards and directors (Bahuaja Sonene), directors of partner NGOs (Talamanca), leaders of indigenous groups (Sierra de las Minas), leaders of PIP-sponsored activities (Machalilla), lead staff with USAID missions and bureaus, and members of the board of directors of The Nature Conservancy.

If such women are made visible through publications, environmental education materials, annual reports, and public presentations, stereotypes are dispelled and other women are encouraged to become more active. For example, in Bahuaja Sonene, the presence of women as former park directors, park rangers, community health workers, and volunteer park rangers serves to dispel the all-too-common idea that protected areas are too remote to attract female professionals.

Exercise

Give each participant a different example of environmental education materials, agency and organization publications, speeches, and presentations. Have them do an individual analysis of the material to determine how often men and women are represented both graphically and textually. Have individuals then report their findings back to the large group. Generally, men are overwhelmingly referred to and pictured. Attention to gender is an indicator of diversity, and diversity is an indicator of the inclusion of a variety of people and groups in the name of conservation. The findings from the exercise should be used by those developing educational materials.

STEP FOUR: BUILD ON WOMEN'S INDIVIDUAL AND GROUP EXPERIENCES

Note to the Facilitator

Because women are less visible as community leaders and resource managers, special efforts may be required to include women as active project participants. Experience shows that integrating women into the central activities of projects and activities is generally more effective than a separate effort directed at women. This may vary, however, especially in areas where women traditionally work together in groups or where there are taboos against unrelated males and females working together. Sometimes, further efforts must be directed towards women who have been discriminated against in the past or who require a measure of self-reliance to avoid conflict or competition with men (Dixon-Mueller and Anker). Sometimes, there are regions where women head many or most of the households—in parts of the Amazon forest, for example—or where women specialize in tasks that could be made more productive with specific assistance targeted to them.

There are several patterns of women working in groups that are seen in various PIP projects:

Pattern One: Women's Economic Activities

Two examples illustrate the many economic activities around and in PIP-protected areas:

- The Committee of Women, established in 1996 in Machalilla, has successfully raised chickens for sale to local hotels. These women are middle-aged. According to these women, younger women do not participate because of their husbands' jealousy or their childcare responsibilities. The project has provided training in small business skills in accounting, cost calculations, and administration. Technical assistance has been provided on the feeding of chickens and veterinarian services. Because of the subsidized inputs by the PIP project, this business may not be self-supporting or sustainable.

- A women's group in Sierra de las Minas has been working for six years with the idea of earning income. The group began with sewing projects, both for the home and the market, with little success. With help from the Peace Corps, it also began baking cookies for sale. Through a government agency, the group had exchanges with other women's groups and the opportunity for scholarships for further schooling. The group had experimented with vegetable gardens and were thinking of providing food services to tourists. None of these enterprises has been economically successful to date. An ongoing effort to grow organic coffee seems to hold promise because it has a competitive advantage, is a value-added product, and is market-based.

Exercise

Ask a staff member working with women's economic activities to present an activity as a brief case study. After the presentation, have the participants evaluate the activity: How does it relate to the conservation of biodiversity? Does it have a competitive advantage and a value-added product? Is the product market-based? Do the women have small business skills? Is the activity sustainable without PIP project subsidies?

Pattern Two: Women as Pioneers

In Punta Allen in the Sian Ka'an protected area, there is a sense of urgency to transform fishermen to tour guides before the reef dies. A tour guide class has been set up to teach English and other skills. One woman is a part of this group, although she is not a fisherwoman. Instead, because she is charismatic and eager to participate, she was accepted in the class. She acts as a role model for other women. Often, women who break with tradition—for example, the fisherwomen in Machalilla—are pointed to either with pride or with dismay. They are change agents.

Exercise

At a staff meeting, brainstorm who the women pioneers are within the community. Consider whether they are community leaders. Consider how they may be effective partners in conservation.

Pattern Three: A Women's Component of an Established Organization

Near Bahuaja Sonene, a union of rural people is trying to integrate women into the association by making sure their language is gender sensitive. Its publications and programs highlight both men and women. At the same time, there is a women's component that includes a woman extension agent who works with women and on union activities directed specifically toward women. There is a long-standing debate over whether to have a women's component within the organization or to work to integrate women fully into the mainstream of the union's activities. Some combination of the two seems most productive.

Exercise

Do a brief institutional analysis of organizations and agencies working in or near PIP-protected areas. For example, identify decision-making bodies and look at their male-to-female ratio. Look at the women's branch, if there is one, and its productivity, programs, policy, and power structure. Informally interview women and men and ask them to evaluate

women's participation in the institution. Look at the membership and who is served. Answer the question: How can these analysis findings be used to improve conservation work?

STEP FIVE: REMOVE BARRIERS TO PARTICIPATION

Note to the Facilitator

In Peru, Rosa Barrantes of the Instituto de Saber writes, "if there were a policy where women could participate with their own voice and with decision-making powers it would be possible to confront many of the great problems that affect the environment" (Marin, p. 31).

As the team talked with staff and local people during the evaluation, a rationale on the importance of women's participation in conservation efforts gradually emerged:

- Women are community leaders, often invisible to outsiders;
- Women often are those who organize environment events, from saving the turtles to celebrating traditional rituals and values;
- Women manage natural resources daily—for example, gardens, firewood, medicinal plants, and herbs—and have important roles in farming, fishing, and hunting.
- Since women are the primary caregivers, they pass on environmental messages to their children.
- Women do not drink up profits from economic activities or spend money on themselves as men do but, instead, spend them on their children's education or on the household.

Throughout the evaluation at all the sites visited, however, reasons were given for why women do not participate more in the work of the PIP project. The barriers to women's participation that were mentioned included a mix of cultural and institutional factors:

- Indigenous women do not speak Spanish.
- Women do not leave the community, and they are not as mobile as men.
- Women are supposed to stay at home.
- Women do not attend public meetings.
- Women marry young and drop out of school at younger age than boys do.
- Women are not contacted by PIP staff.

- There is a prevalence of machismo.
- There is jealousy within the community if a local woman is hired as an extension agent.
- Women are thought to not want to attend training activities—but often are eager to do so.
- Women are perceived of as merely housewives and women.
- There is little value placed on women's work or their roles with natural resources.
- There are perceptions of what women will and will not do. Beehives in El Ocote were introduced, but it was perceived that women would not tend the hives because the bees were too aggressive. Yet the men abandon the hives when the coffee is ready to be cut.

Many obstacles are specific to a particular culture, country, or region. In Guatemala, officials were pleased that widows in an indigenous group near Sierra de las Minas were to be given title to land as heads of household. The women, however, were ashamed to claim their title publicly. The shame may be related to the women's perceived failure to keep their husbands alive and to their living in a home where there is no man. (See Margaret Owens and Marty Chen, for example, on the plight of widows worldwide.)

Given that conservation depends on the participation of both men and women, that women participate less than men because of a variety of barriers, and that many of these barriers are specific to a particular culture, a simple strategy for addressing the barriers is to rely on the expertise and experience of local NGOs that work with women.

In all the countries where there are Parks in Peril sites, organizations are working on behalf of women. In Mexico alone, there are 370 women's organizations. There are regional networks of women's organizations, such as the "Red de Mujeres Afrocaribenas y Afrolatinoamericanas" housed in Costa Rica. There are indigenous groups, such as the Ayamara women in Bolivia, which have formed organizations to defend their culture, land, and territories. Many of these organizations are focused on gender and the environment or on ways of involving women in community development. The themes of the first international conference on women of the Amazon forest held in 1999 in Rio Branco, Brazil, were women, development, and the environment. The conference developed new networks and revealed old ones.

Exercise

Identify local groups through a brainstorming session and assign each staff member a group to research and to contact. Many groups may be willing partners in conservation that have developed techniques for reaching women and overcoming the barriers to participation that many women confront.

STEP SIX: WORK ACROSS SECTORS

A Note to the Facilitator

A community-based approach to addressing environmental protection and sustainable natural resource management acknowledges an interaction of the environment and resource use with political, economic, and social forces. Of particular importance in PIP is the interaction of the conservation of biodiversity and education, and the interaction of conservation and democracy and governance.

Education

Between 1970 and 1990, illiteracy in Latin America has fallen, often dramatically, but with variations among countries. For example, in the countries visited by the PIP evaluation team, only Costa Rica's illiteracy rate is below 10 percent. Mexico, Ecuador, and Peru have rates between 10 percent and 20 percent. In Guatemala, more than 20 percent of the population are illiterate. Although women's illiteracy has dropped in all of the countries mentioned, except Costa Rica, there are more illiterate women than men. In Guatemala, Peru, and Ecuador, there are important differences between illiterate men and women. Rural and indigenous groups often show more illiteracy than the general population and greater gaps between men and women (Valdez and Gomariz, p. 98).

In a USAID-supported national survey of people's awareness of environmental issues in Peru, there was a significant difference between men and women regarding their knowledge of environmental issues, including the conservation of biodiversity and protected areas. Compared with men, women knew less. The differences disappeared, however, when education was taken into account. Therefore, the results of the survey gave central importance to education as a means of addressing environmental issues, including conservation. The hypothesis was: given that knowledge about environmental problems and the measures needed to overcome them increases with education, that in the next few years levels of education for Peruvians will go up, and that the difference between men's and women's education will diminish, it can be expected that the general environmental knowledge of the population will increase. Therefore, support for education—in particular, women's education—is important to environmental protection (Rojas, p. 6).

Exercise

Discuss how supporting education, especially women's education, can be a conservation tool. In this light, USAID's support of programs such as the Girl's and Women's Education Program of the Office of Women in Development is also seen as support for environment and natural resource objectives.

Democracy and Governance

There is a recognition that the conservation of biodiversity and the health and welfare of protected areas are often dependent on local level solutions derived from community initiatives.

- In Machalilla, the reserve personnel have gone from policing protected areas to keep people out, to participatory planning with communities in the management of the reserve.

- In La Gandoca, a part of the Talamanca Corridor, the land within the protected area belongs to the members of the community. Without their support and participation in its management, there is no protected area.

Community approaches, however, can act against women's interests. For example, women worldwide often have a small political presence on community councils. Public meetings often are perceived as male spaces. In a small village in La Encrucijada's protected area, a public meeting with PIP evaluators drew only the fishermen. Women were working elsewhere. As one woman commented, "Many programs have no women. Many staff members do not talk with them. They are women." The following are simple strategies to address these common barriers:

- Women worldwide generally are more comfortable talking with other women. In some cultures, it is inappropriate for women to talk with men outside of their families. In El Ocote, La Encrucijada, and Machallila, PIP staff reach out to women using local women as community workers and extension agents.

- To reach women with conservation messages and programs, it is important to identify where women meet and what areas are under their influence. Many times, formal, public spaces are not open to women. Often, natural resources are "gendered"; for example, women control the fruit but not the fruit tree.

- Some PIP sites are in the midst of a postconflict situation—a transitional period from conflict to an increasingly democratic and decentralized state. For example, the war in Guatemala, ironically enough, gave women more public space, especially through the prestigious National Coordinating Committee of Widows and through such indigenous leaders as Rigoberta Menchu and Rosalina Tuyuc. The Guatemala Peace Accord emphasized support to Mayan women. These democratic openings provide a forum for women to discuss many concerns, including those related to the environment.

Exercise

Discuss in small groups how PIP project participatory processes not only promote conservation and support for protected areas but also can be vital in strengthening social organization and democratic institutions, including women's rights organizations. In a large group brainstorming session, explore how USAID and others working on democracy and

governance issues can collaborate with the environment sector to learn from and support each other.

INDICATORS OF GENDER

Although it is not known the exact number of women and men who have participated in the PIP project, it is apparent from visiting the sites that more men than women are agents and beneficiaries of the project. If the goal is for all people, regardless of gender, to feel ownership for conservation, this needs to be rectified. An essential step is to gather participation data disaggregated by sex. The null (neutral) hypothesis for participation is 50 percent men and 50 percent women. If the null hypothesis does not stand, then the efficiency of the bias toward men—or women—needs to be explained. More sensitive gender indicators also could be developed for particular projects and activities by recognizing the important subgroups that exist within gender groups distinguished by age, marital status, ethnicity, occupation, or other relevant social variables.

BIBLIOGRAPHY

Chen, Marty, and J. Dreuze. 1992. "Widows and Well-Being in Rural North India." Discussion paper No. 40: London School of Economics.

Dixon-Mueller, R., and R. Anker. 1988. "Assessing Women's Economic Contributions to Development." International Labour Organization: Geneva.

Gammage, Sarah, et.al. 1999. "Population, Consumption, and Environmental Linkages in a Mangrove Ecosystem in the Gulf of Fonseca." International Center for Research on Women: Washington, D.C.

Marin, Alexandra Ayala, ed. 1991. Mujer y Medio Ambiente. Fundacion Natura–CEPLAES: Quito, Ecuador.

Owen, Margaret. 1996. A World of Widows. Zed Books: London.

"Parks in Peril: External Evaluation of LAC Region." 1998. USAID: Tropical Research and Development Inc., Gainesville, Florida.

Rojas, Mary Hill. 1998. "A Gender-Focused Analysis of the Peru Environment and Natural Resources Survey and the Design of a Public Presentation of the Survey." WIDTECH/USAID: Washington, D.C.

Uldfelder, William, et al. 1997. "Participatory Conservation: Lessons of the PALOMAP Study." Working Paper No. 1. The Nature Conservancy: Ballston, Virginia.

Valdez, Teresa, and E. Gomariz. 1995. Latin American Women. Instituto de la Mujer de Espana and FLACSO: Santiago, Chile.